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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,300	05/31/2001	Andrew Thomson	5150-46100	2378

35690 7590 04/20/2005

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EXAMINER	
BURGESS, BARBARA N	

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/872,300	THOMSON, ANDREW	
	Examiner	Art Unit	
	Barbara N. Burgess	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40 and 42-81* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40, 42-81* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1-18-05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to Amendments filed January 13, 2005. Claim 41 is cancelled as requested by Applicant. Claims 1-40, 42-69 are presented for further examination. Claims 70-81 are presented for initial examination.

Claim Rejections - 35 USC § 112

1. Claims 1, 4-5, 8, 10-13, 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

2. Claims 1, 4-5, 8, 10-13, 19 recite the limitation "the instrument server". There is insufficient antecedent basis for this limitation in the claim. The limitation "wherein the second device comprises an instrument server" was amended and taken out of the preamble. Therefore, the limitation "the instrument server" lacks antecedent basis.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

2. Claims 1-11, 13, 15-40, 42-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petite et al. (hereinafter "Petite", 6,437,692 B1) in view of Applicant's Admitted Prior Art (hereinafter "AAPA").

As per claims 1, 56, 65, Petite discloses a method, system, and carrier medium comprising program instruction comprising:

- A first device coupled to a network sending a request to a second device coupled to the network to access a traditional instrument, wherein the traditional instrument is coupled to the second device via an instrumentation bus, and wherein the traditional instrument does not include inherent Internet capabilities (Abstract, column 2, lines 42-65, column 3, lines 2-10, 22-30);
- The instrument server receiving the request to access the traditional instrument (column 2, lines 49-53, column 3, lines 40-45, column 6, lines 24-27, column 7, lines 41-45, column 11, lines 5-52, column 12, lines 20-23);
- The instrument server accessing the traditional instrument via the instrumentation bus in response to said request to access the traditional instrument (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45);
- The traditional instrument sending instrument data to the server device via the instrumentation bus in response to the instrument server accessing the traditional instrument (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45, column 10, lines 12-17, column 11, lines 14-17, 33-65, column 12, lines 4-20);
- The instrument server receiving the instrument data sent from the traditional instrument via the instrumentation bus (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45);

- The instrument server sending the instrument data to the first device via the network (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

Petite does not explicitly disclose:

- The second device receiving from the network an instrument driver which is usable by the second device to communicate with the traditional instrument.

However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claim 2, Petite discloses the method of claim 1, further comprising, prior to said first device sending the request to the second device, connecting the traditional instrument to the second device (column 2, lines 48-51, 55-62, column 3, lines 22-25, column 6, lines 15-25).

As per claims 3, 66, Petite further discloses the method and carrier medium of claims 1 and 65, further comprising displaying on the first device a graphical user

interface to the traditional instrument coupled to the second device, wherein the graphical user interface is operable by the user to remotely control functionality of the traditional instrument from the second device (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

As per claim 4, Petite discloses the method of claim 1, further comprising the first device receiving the instrument data from the instrument server via the network; and displaying the received instrument data on the first device (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 5, Petite also discloses the method of claim 4, wherein the first device comprises a web browser, wherein said displaying the instrument data on the first device is performed by the web browser, wherein the instrument data is displayed by the web browser in one or more web pages provided by the instrument server (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claims 6, 69, Petite discloses the method and carrier medium of claims 1 and 65, wherein the request to access the traditional instrument is generated in response to user input on the first device (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

As per claim 7, Petite further discloses the method of claim 1, wherein the first device comprises a web browser, wherein the request to access the traditional instrument is generated in response to user input to the web browser program (column 5, lines 58-61, column 7, lines 41-46, column 8, lines 3-13, 46-60, column 9, lines 55-65, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 8, Petite discloses the method of claim 7, wherein the user input that generates the request to access the traditional instrument is received by the web browser in a web page provided by the instrument server (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 9, Petite discloses the method of claim 8, wherein the web page provides a graphical user interface to the traditional instrument coupled to the second device (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

As per claims 10, 58, Petite does not explicitly disclose the method and system of claims 1 and 57, wherein the instrument server accessing the traditional instrument comprises:

- The instrument server accessing an instrument driver for the traditional instrument;
- The instrument driver accessing the first instrument via the instrumentation bus in response to the instrument server accessing the instrument driver.

However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claim 11, Petite discloses the method of claim 10, wherein, prior to the instrument server accessing the instrument driver, the method further comprises the second device receiving the instrument driver from the first device (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45).

As per claim 13, Petite also discloses the method of claim 1, wherein the instrument server accessing the traditional instrument comprises the instrument server requesting the instrument data from the traditional instrument (column 2, lines 49-53, column 3, lines 40-45, column 6, lines 24-27, column 7, lines 41-45, column 11, lines 5-52, column 12, lines 20-23).

As per claim 15, Petite further discloses the method of claim 1, further comprising, prior to the first device sending the request to access the traditional instrument:

- The instrument server providing instrument information about one or more traditional instruments coupled to the second device to the first device through the network, wherein the one or more traditional instruments include the traditional instrument (column 8, lines 46-60, column 11, lines 33-65);
- Displaying the instrument information about the one or more traditional instruments on the first device (column 8, lines 46-60, column 11, lines 33-65).

As per claim 16, Petite discloses the method of claim 15, further comprising: receiving user input on the first device selecting the traditional instrument from the displayed instrument information about the one or more traditional instruments prior to the first device sending the request to access the traditional instrument (column 12, lines 5-23, 38-40, 55-67).

As per claim 17, Petite discloses the method of claim 15, wherein the first device comprises a web browser, wherein said displaying the instrument information about the one or more traditional
instruments on the first device is performed by the web browser (column 8, lines 46-60, column 11, lines 33-65).

As per claim 18, Petite further discloses the method of claim 1, wherein a plurality of traditional instruments including the traditional instrument are coupled to the second

device via the instrumentation bus, and wherein the first device is operable to send requests to access each of the plurality of traditional instruments to the second device (column 2, lines 48-52, column 3, lines 20-29, 40-45, column 6, lines 15-27, column 7, lines 41-45, column 11, lines 5-52, column 12, lines 20-23.

As per claim 19, Petite discloses the method of claim 1, further comprising:

- The instrument server scanning the instrumentation bus to detect instruments coupled to the instrumentation bus (Abstract, column 2, lines 42-65, column 3, lines 2-10, 22-30);
- Said scanning detecting one or more traditional instruments coupled to the instrumentation bus including the traditional instrument (Abstract, column 2, lines 42-65, column 3, lines 2-10, 22-30);
- The instrument server receiving instrument information from each of the detected one or more traditional instruments (column 8, lines 46-60, column 11, lines 33-65);
- The instrument server providing the instrument information from the one or more detected traditional instruments to the first device wherein the one or more traditional instruments are user-selectable from the first device using the instrument information (column 8, lines 46-60, column 11, lines 33-65, column 12, lines 5-23, 38-40, 55-67).

As per claim 20, Petite discloses the method of claim 1, wherein there are one or more other devices coupled to the network, and wherein the second device is operable to receive requests to access the traditional instrument from the one or more other devices (column 6, lines 27-30).

As per claim 21, Petite discloses the method of claim 1, wherein the instrumentation bus is one of a GPIB instrumentation bus, a PCI instrumentation bus, a PXI instrumentation bus, and a serial
instrumentation bus (column 6, lines 45-49, column 12, lines 47-49).

As per claim 22, Petite discloses the method of claim 1, wherein the network is the Internet (column 2, lines 54-57, column 5, lines 25-30).

As per claims 23, 68, Petite discloses a method and carrier medium comprising program instruction, wherein the program instructions are computer-executable to implement:

- Detecting a first traditional instrument coupled to the instrumentation bus, wherein the first traditional instrument does not include inherent Internet capabilities (Abstract, column 2, lines 42-65, column 3, lines 2-10, 22-30);
- Receiving instrument information from the detected first traditional instrument (column 8, lines 46-60, column 11, lines 33-65);
- Transmitting to a network a request for an instrument from the detected first traditional instrument (column 2, lines 48-51, 55-62, column 3, lines 22-25, column 6, lines 15-25);
- Providing the instrument information of the first traditional instrument to a second device coupled to the first device via the network (column 8, lines 46-60, column 11, lines 33-65, column 12, lines 5-23, 38-40, 55-67);

- Displaying the instrument information of the first traditional instrument on the second device (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30);
- Wherein the first traditional instrument coupled to the first device via the instrumentation bus is remotely accessible from the second device to initiate monitor and control functions of the traditional instrument (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

Petite does not explicitly disclose:

- Transmitting to a network a request for an instrument driver which corresponds to the instrument information, wherein the instrument driver is usable to communicate with the first traditional instrument;
- Receiving the instrument driver from the network.

However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claim 24, Petite discloses the method of claim 23, wherein the second device comprises a web browser program, wherein said displaying the instrument information comprises the web browser
program displaying the instrument information in a web page (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claims 25, 62-63, Petite discloses the method and system of claims 23 and 56, further comprising: receiving user input on the second device, wherein the user input specifies the first traditional instrument; and sending a request to access the first traditional instrument from the second device to the first device through the network in response to the user input (column 12, lines 5-23, 38-40, 55-67).

As per claims 26, 60, Petite discloses the method and system of claims 25 and 58, further comprising:

- The first device sending a user interface specification for the first traditional instrument to the second device via the network in response to the request to access the first traditional instrument (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30);
- Displaying on the second device a user interface to the first traditional instrument in accordance with the user interface specification (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

As per claim 27, Petite discloses the method of claim 26, wherein the user interface specification includes one or more web pages displayable by a web browser on the second device (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 28, Petite discloses the method of claim 23, wherein said scanning detects a plurality of traditional instruments including the first traditional instrument coupled to the first device via the instrumentation bus, and wherein said receiving the instrument information, said providing the instrument information, and said displaying the instrument information are performed for the plurality of traditional instruments (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

As per claim 29, Petite discloses the method of claim 23, wherein there are one or more other devices coupled to the network, wherein the method further comprises providing the instrument information of the first traditional instrument to the one or more other devices, and wherein the first traditional instrument coupled to the first device via the instrumentation bus is remotely accessible from the one or more other devices to imitate monitor and control functions of the first traditional instrument (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

As per claim 30, Petite discloses the method of claim 23, wherein said scanning, said receiving, and said providing are performed by an instrument server executable on the first device (columns 13-14).

As per claim 31, Petite also discloses the method of claim 23, wherein, after said detecting the first traditional instrument, the method further comprises downloading an instrument driver for the first traditional instrument from another device to the first device via the network (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45, column 10, lines 12-17, column 11, lines 14-17, 33-65, column 12, lines 4-20).

As per claim 32, Petite discloses the method of claim 23, wherein the network is the Internet (column 2, lines 54-57, column 5, lines 25-30).

As per claim 33, Petite further discloses a method for providing Internet capabilities to a traditional instrument, wherein the traditional instrument does not inherently include Internet capabilities, the method comprising:

- Connecting the traditional instrument to a first device, wherein the first device includes an Internet server (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23);
- Receiving identification information from the traditional instrument (column 8, lines 46-60, column 11, lines 33-65);

- Connecting the first device to the Internet wherein the Internet server provides web pages accessible from other devices connected to the Internet, wherein the web pages include one or more web pages configured for use in accessing the traditional instrument connected to the first device (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

Petite does not explicitly disclose:

- Transmitting to the Internet a request for an instrument driver, wherein the instrument driver is usable by the fist device to communicate with the traditional instrument, and wherein the request is based on the identification information;
- Receiving the instrument driver.

However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claim 34, Petite discloses the method of claim 33, wherein said accessing the traditional instrument includes sending command instructions to the traditional instrument and receiving and displaying instrumentation data from the traditional

instrument (column 2, lines 49-53, column 3, lines 40-45, column 6, lines 24-27, column 7, lines 41-45, column 11, lines 5-52, column 12, lines 20-23).

As per claims 35 and 36, Petite discloses the method of claim 33, further comprising:

- Accessing the Internet server from a second device connected to the Internet (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23);
- Displaying one or more web pages provided by the Internet server in a web browser on the second device (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 37, Petite discloses the method as recited in claim 33, wherein the one or more web pages configured for use in accessing the traditional instrument connected to the first device

- Each include interface items for the traditional instrument, wherein the interface items of a particular web page include one or more of control items and display items (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23);
- Wherein the control items are user-selectable to send control instructions to the traditional instrument (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30);

- Wherein the display items are configured for use in displaying data received from the traditional instrument (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

As per claims 38, 45, 52, 74, Petite discloses a device comprising:

- A first port operable to couple to a network (column 5, lines 48-50, column 6, lines 15-30, 45-49, column 7, lines 41-46);
- A second port operable to couple to an instrumentation bus (column 5, lines 48-50, column 6, lines 15-30, 45-49, column 7, lines 41-46);
- A processor (column 5, lines 48-50, column 6, lines 15-30, 45-49, column 7, lines 41-46);
- Memory coupled to the processor and operable to store program instructions, wherein the program instructions are executable by the processor to:

  Receive from another device coupled to the network a request to access a traditional instrument coupled to the instrumentation bus, wherein the traditional instrument does not include inherent Internet capabilities (Abstract, column 2, lines 42-65, column 3, lines 2-10, 22-30);

Petite does not explicitly disclose:

- Receive an instrument driver from the network;
- Store the instrument driver in the memory;
- Wherein the instrument driver comprises program instructions which are executable by the processor to:

Access the traditional instrument via the instrumentation bus in response to said request to access the traditional instrument;

Receive instrument data sent from the traditional instrument via the second port;

- Wherein the program instructions are further executable by the processor to:

Send the instrument data to the other device via the first port.

However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claims 39, 46, Petite discloses the device of claims 38 and 45, wherein the program instructions are further executable by the processor to provide to the other device a graphical user interface for the traditional instrument, wherein the graphical user interface is executable within the other device to initiate monitor and control functions of the traditional instrument from the other device and to display the received instrument data (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30).

As per claim 40, 47, Petite discloses the device of claims 39 and 46, wherein the graphical user interface comprises one or more web pages displayable by a web browser on the other device (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 42, Petite further discloses the device of claim 38, wherein, in said accessing the traditional instrument via the instrumentation bus, the program instructions are further executable by the processor to request the instrument data from the traditional instrument (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45).

As per claims 43, 50, Petite discloses the device of claims 38 and 45, wherein the instrumentation bus is one of a GPIBinstrumentation bus, a PCI instrumentation bus, a PXI instrumentation bus, and a serial
instrumentation bus (column 6, lines 45-49, column 12, lines 47-49).

As per claims 44, 51, Petite discloses the device of claim 38 and 45, wherein the network is the Internet (column 2, lines 54-57, column 5, lines 25-30).

As per claim 48, Petite discloses the device of claim 45, wherein said scanning detects a plurality of traditional instruments including the traditional instrument coupled to the device via the instrumentation bus, and wherein the program instructions are further executable by the processor to:

- Receive instrument information from each of the detected plurality of traditional instruments via the second port (column 8, lines 46-60, column 11, lines 33-65, column 12, lines 5-23, 38-40, 55-67);
- Send the instrument information of each of the plurality of traditional instruments to the second device via the network (column 8, lines 46-60, column 11, lines 33-65, column 12, lines 5-23, 38-40, 55-67).

As per claim 49, Petite discloses the device of claim 48.

Petite does not explicitly discloses wherein after said detecting the plurality of traditional instruments, the program instructions are further executable by the processor to download an instrument driver for each traditional instrument of the plurality of traditional instruments from the second device to the device via the network. However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claim 53, Petite discloses the device of claim 52, wherein the program instructions comprise a web browser, and wherein said receiving the instrument information, said displaying the instrument information, said receiving user input selecting the first traditional instrument, and said receiving user input specifying the one or more instructions are performed in one or more web pages displayed by the web browser (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 54, Petite discloses the device of claim 52, wherein the program instructions are further executable by the processor to:

- Receive instrument data sent from the second device (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23);
- Display the received instrument data (column 5, lines 58-61, column 8, lines 3-13, column 9, lines 55-65, column 10, lines 25-30);
- Wherein the instrument data is generated by the first traditional instrument on the second device in response to the one or more instructions (column 8, lines 46-60, column 11, lines 33-65, column 12, lines 5-23, 38-40, 55-67).

As per claim 55, Petite discloses the device of claim 54, wherein the program instructions comprise a web browser, and wherein the web browser is executable by the processor to display the received instrument data on one or more web pages (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claims 57 and 67, Petite discloses the system and carrier medium of claims 56 and 65, wherein the first program instructions are further executable within the first device to:

- Receive the requests sent by the second program instructions executing within the second device (column 2, lines 49-53, column 3, lines 40-45, column 6, lines 24-27, column 7, lines 41-45, column 11, lines 5-52, column 12, lines 20-23);
- Direct the first traditional instrument to perform the received requests (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45);
- Receive instrument data generated by the first traditional instrument performing one of more of the received requests (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45, column 10, lines 12-17, column 11, lines 14-17, 33-65, column 12, lines 4-20);
- Send the received instrument data to the second device via the network (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 61, Petite discloses the system of claim 60, wherein the second program instructions comprise a web browser, and wherein the web browser is executable within the second device to display the received instrument data on one or more web pages, and wherein the first program instructions are operable to provide the one or more web pages to the web browser in response to said selecting the first

traditional instrument (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23)

As per claim 64, Petite discloses the system of claim 56, wherein the network is the Internet (column 2, lines 54-57, column 5, lines 25-30).

As per claim 70, Petite discloses a method for using a traditional instrument with a network, comprising:

- A first device detecting the traditional instrument, wherein the first device is coupled to the traditional instrument, wherein the first device is coupled to the network (Abstract, column 2, lines 42-65, column 3, lines 2-10, 22-30).

Petite does not explicitly disclose:

- Automatically receiving, from the network, an instrument driver which is associated with the traditional instrument, wherein the instrument driver comprises program instructions which are executable by the first device to communicate with the traditional instrument;
- After said receiving, communicating with the traditional instrument, wherein said communicating comprises using the instrument driver.

However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claim 71, Petite does not explicitly disclose the method of claim 70 wherein said automatically receiving comprises downloading the instrument driver from a second device coupled to the network.
However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claim 72, Petite discloses the method of claim 70, further comprising:

- Receiving from the network a request for information associated with the instrument (column 2, lines 49-53, column 3, lines 40-45, column 6, lines 24-27, column 7, lines 41-45, column 11, lines 5-52, column 12, lines 20-23);

- Wherein said communication with the traditional instrument is performed in response to said receiving from the network request (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45);
- The method further comprising transmitting a response to the network (column 2, lines 48-52, column 3, lines 20-29, column 6, lines 15-25, column 7, lines 41-45, column 10, lines 12-17).

As per claim 73, Petite discloses the method of claim 72, wherein the request comprises a request for a measurement (column 2, lines 49-53, column 3, lines 40-45, column 6, lines 24-27, column 7, lines 41-45, column 11, lines 5-52, column 12, lines 20-23).

As per claims 75-76, 79-80, Petite discloses the device of claim 74, wherein the program instruction are further executable by the processor to:

- Receive, from a second device coupled to the network, a request to access the first traditional instrument (Abstract, column 2, lines 42-65, column 3, lines 2-10, 22-30).

Petite does not explicitly disclose:

- Wherein the first instrument driver comprises program instructions which are executable by the processor to:

  Access the first traditional instrument through the instrumentation bus.

However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data,

over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

As per claims 77 and 81, Petite discloses the device of claims 76 and 80, wherein in said transmitting the data to the network, the program instructions are further executable by the processor to transmit a web page to the network, wherein the web page comprises the data (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

As per claim 78, Petite discloses the device of claim 74, wherein the program instructions are further executable by the processor to:

- Detect a second traditional instrument coupled to the instrumentation bus (column 7, lines 41-46, column 8, lines 46-60, column 10, lines 5-11, 21-30, column 12, lines 20-23).

Petite does not explicitly disclose:

- Receive, from the network, a second instrument driver which is associated with the second traditional instrument, wherein the second instrument driver comprises program instructions which are executable by the processor to communicate and/or control the second traditional instrument;

- Store the second instrument driver in the memory.

However, AAPA discloses application programs typically operate in conjunction with one or more instrument drivers to interface to actual physical instruments. Driver level software handles the details of communication, i.e., the transfer of commands and data, over a physical connection between the computer and instruments (specification pages 5-7).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's instrument driver in Petite's system in order to encapsulate, at a high and low level, the commands that are required to communicate to a given instrument.

3. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petite et al. (hereinafter "Petite", 6,437,692 B1) in view of Reimer.

As per claim 12, Petite discloses the method of claim 1 as discussed above.

However, Petite does not explicitly discloses, wherein, prior to the instrument server accessing the instrument driver, the method further comprises downloading the first instrument driver from a third device to the second device via the network.

In an analogous art, Reimer discloses accessing fuel quantity, fuel economy, and fuel tank size information to the server through a third network. The server further receives routing information from the dispatch terminal through a fourth network and fuel-price-by-location information through a fifth network (column 4, lines 43-59).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate downloading the first instrument driver from a third device to the second device via the network in Petite's method in order to have access to multiple types of information that may be of use to the driver.

As per claim 14, Petite discloses the method of claim 1 as discussed above.

However, Petite does not explicitly discloses information requesting the traditional instrument to perform one or more actions, and wherein the instrument data is generated from the traditional instrument performing at least part of the requested one or more actions.

In an analogous art, Reimer discloses the server requesting the fuel level sensor for tank capacity, fuel quantity, and fuel economy information (column 5, lines 18-20).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate traditional instrument includes information requesting the traditional instrument to perform one or more actions, and wherein the instrument data is generated from the traditional instrument performing at least part of the requested one or more actions in Petite's method in order to for the dispatch terminal to develop an optimal routing, refueling location, refueling quantity, and direction listing for the driver of the vehicle.

Response to Arguments

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N. Burgess whose telephone number is (571) 272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Ettinene can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barbara N Burgess
Examiner
Art Unit 2157

April 17, 2005

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